

## **Historic, Archive Document**

Do not assume content reflects current scientific knowledge, policies, or practices.



A281.8

# ARM INDEX

U.S.  
DE  
OF

AGRICULTURE  
ECONOMIC  
RESEARCH  
SERVICE

NOVEMBER 1967

*also in this issue:*

*The National Farm Model*

*How Much Cleanliness  
Can We Afford?*

*What Has the Housewife  
Wrought?*

*Food and the Far East  
That Special Touch*



# ECONOMIC TRENDS

ITEM	UNIT OR BASE PERIOD	'57-'59 AVERAGE	1966		1967		
			YEAR	SEPTEMBER	JULY	AUGUST	SEPTEMBER
<b>Prices:</b>							
Prices received by farmers	1910-14=100	242	266	270	257	256	252
Crops	1910-14=100	223	235	235	225	224	217
Livestock and products	1910-14=100	258	292	300	285	283	283
Prices paid, interest, taxes and wage rates	1910-14=100	293	334	337	345	343	344
Family living items	1910-14=100	286	315	318	323	323	323
Production items	1910-14=100	262	285	289	291	289	290
Parity ratio		83	80	80	74	75	73
Wholesale prices, all commodities	1957-59=100	—	105.9	106.8	106.5	106.1	106.2
Industrial commodities	1957-59=100	—	104.7	105.2	106.0	106.3	106.5
Farm products	1957-59=100	—	105.6	108.7	102.8	99.2	98.1
Processed foods and feeds	1957-59=100	—	113.0	115.5	113.1	112.1	112.8
Consumer price index, all items	1957-59=100	—	113.1	114.1	116.5	116.9	—
Food	1957-59=100	—	114.2	115.6	116.0	116.6	—
<b>Farm Food Market Basket:</b> <sup>1</sup>							
Retail cost	Dollars	983	1,100	1,116	1,091	1,099	—
Farm value	Dollars	388	442	455	433	428	—
Farm-retail spread	Dollars	595	658	661	658	671	—
Farmers' share of retail cost	Per cent	39	40	41	40	39	—
<b>Farm Income:</b>							
Volume of farm marketings	1957-59=100	—	121	132	118	129	139
Cash receipts from farm marketings	Million dollars	32,247	43,219	4,023	3,335	3,654	3,950
Crops	Million dollars	13,766	18,384	1,790	1,405	1,515	1,780
Livestock and products	Million dollars	18,481	24,835	2,235	1,930	2,139	2,170
Realized gross income <sup>2</sup>	Billion dollars	—	49.7	50.0	—	—	49.2
Farm production expenses <sup>2</sup>	Billion dollars	—	33.3	33.5	—	—	34.4
Realized net income <sup>2</sup>	Billion dollars	—	16.4	16.5	—	—	14.8
<b>Agricultural Trade:</b>							
Agricultural exports	Million dollars	4,105	6,855 <sup>3</sup>	569	472	470	—
Agricultural imports	Million dollars	3,977	4,492 <sup>3</sup>	415	347	369	—
<b>Land Values:</b>							
Average value per acre	1957-59=100	—	—	150 <sup>4</sup>	160 <sup>4</sup>	—	—
Total value of farm real estate	Billion dollars	—	—	171.1 <sup>4</sup>	182.0 <sup>4</sup>	—	—
<b>Gross National Product:</b> <sup>2</sup>							
Consumption <sup>2</sup>	Billion dollars	457.4	743.3	748.8	—	—	790.1
Investment <sup>2</sup>	Billion dollars	294.2	465.9	470.1	—	—	495.8
Government expenditures <sup>2</sup>	Billion dollars	68.0	118.0	116.4	—	—	109.8
Net exports <sup>2</sup>	Billion dollars	92.4	154.3	157.7	—	—	178.9
2.7	5.1	4.6	—	—	—	—	5.6
<b>Income and Spending:</b> <sup>5</sup>							
Personal income, annual rate	Billion dollars	365.3	584.0	594.1	627.0	631.5	633.5
Total retail sales, monthly rate	Million dollars	17,098	25,306	25,703	26,444	26,588	26,688
Retail sales of food group, monthly rate	Million dollars	4,160	5,927	5,947	6,002	6,047	—
<b>Employment and Wages:</b> <sup>5</sup>							
Total civilian employment <sup>6</sup>	Millions	63.9	72.9	73.2	74.5	74.7	74.6
Agricultural <sup>6</sup>	Millions	5.7	4.0	3.9	3.9	4.0	3.7
Rate of unemployment <sup>6</sup>	Per cent	5.8	3.8	3.7	3.9	3.8	4.1
Workweek in manufacturing	Hours	39.8	41.3	41.4	40.4	40.7	40.7
Hourly earnings in manufacturing, unadjusted	Dollars	2.12	2.72	2.75	2.82	2.82	2.85
<b>Industrial Production:</b> <sup>5</sup>							
Manufacturers' Shipments and Inventories:	1957-59=100	—	156	158	157	158	156
Total shipments, monthly rate	Million dollars	28,745	44,037	44,091	45,346	45,475	—
Total inventories, book value end of month	Million dollars	51,549	77,897	74,884	80,897	81,365	—
Total new orders, monthly rate	Million dollars	28,365	45,182	46,318	45,921	45,559	—

<sup>1</sup> Average annual quantities of farm food products purchased by urban wage-earner and clerical-worker households (including those of single workers living alone) in 1960-61—estimated monthly. <sup>2</sup> Annual rates seasonally adjusted third quarter. <sup>3</sup> Preliminary. <sup>4</sup> As of March 1. <sup>5</sup> Seasonally adjusted. <sup>6</sup> Series revised beginning January 1967, giving data for persons 16 years of age and older.

Sources: U.S. Dept. of Agriculture (Farm Income Situation, Marketing and Transportation Situation, Agricultural Prices, Foreign Agricultural Trade and Farm Real Estate Market Developments); U.S. Dept. of Commerce (Current Industrial Reports, Business News Reports, Advance Retail Sales Report and Survey of Current Business); and U.S. Dept. of Labor (The Labor Force and Wholesale Price Index).

# NATIONAL AGRICULTURAL OUTLOOK CONFERENCE

Washington, D.C., November 13-16, 1967

Once a year representatives and delegates from all 50 states and Puerto Rico join together in Washington to participate in the National Agricultural Outlook Conference.

For four days they take U.S. agriculture apart and put it back together again. They look at prospective demand, supplies and prices for major crops and livestock from every angle. They listen to views on the status of agriculture from experts within and outside the government. And out of it all comes an evaluation of the agricultural outlook for the coming year.

Attending the conference are such people as farm and home economists from state extension services of land-grant colleges and universities, representatives of farm organizations and agribusinessmen.

All sessions are also open to the press and to the public.

## Economic Intelligence Service

Outlook is agriculture's economic intelligence service. It helps farmers and those concerned with agriculture do a better job of planning their production and anticipating supply, price and income prospects.

Yesterday's farmer often knew less about crop and livestock supplies than did his customers. The statistical reports issued by the Department of Agriculture are designed to provide both the farmer and his customers with reliable economic and agricultural information.

But more than just facts are needed. The farmer needs to know the interrelationship between agriculture and the overall economy. The businessman needs to know it too. The farmer wants to know the economic climate in the marketplace where he will be selling the crops he intends to plant and the livestock he plans to raise. The businessman wants to know about

food and fiber supplies, about the agricultural market for consumer goods as well as the market for farm machinery, fertilizer, insecticide and other production items.

The first National Agricultural Outlook Conference, called in 1923 by Agriculture Secretary Henry C. Wallace, was designed to help meet this need. And its basic purpose has not changed much down through the years.

## Year-Round Outlook Services

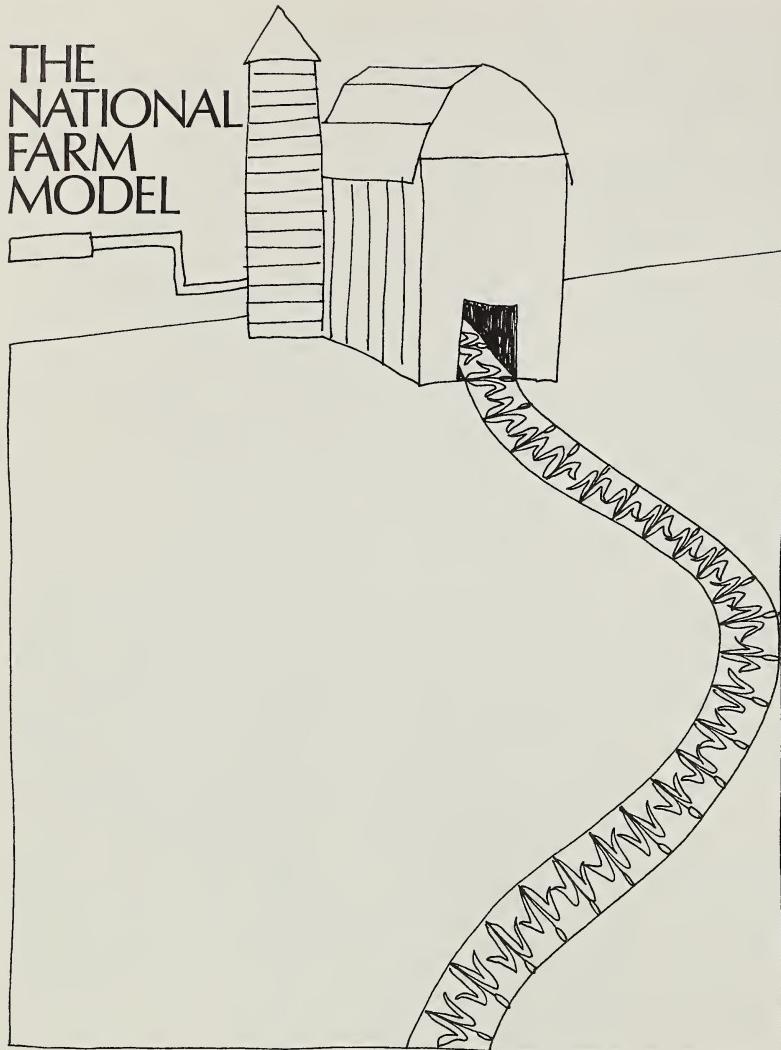
The year-round outlook service (of which the Annual Conference is now a basic part) grew out of the food production effort of World War I. In 1921, the Department began mimeographing monthly economic notes on agricultural commodities. A year later, these became the monthly "Agricultural Situation." In addition to individual commodities, farm credit, labor and demand were reviewed. About 1937, most commodity reviews were expanded into separate situation reports.

Typical of these reports are: the Demand and Price Situation, the Agricultural Outlook, the Feed Situation, the Livestock and Meat Situation and the Poultry and Egg Situation.

The Agricultural Outlook Service is carried on at both national and state levels. The national materials are developed in Washington primarily by a staff of economists and technicians. National outlook information and other available data are used as a basis for state outlook programs carried on by the cooperative extension services in the land-grant colleges and universities.

*(For highlights of this year's agricultural outlook, see the special chartbook section beginning on page 9.)*

# THE NATIONAL FARM MODEL



*Want to know how much corn we may produce in the year 2000? Crank up the "National Model of Agricultural Production and Supply Response" for available facts.*

Imagine the United States as 95 farming situations accounting for 87 per cent of the cotton produced in the United States, 90 per cent of the corn and soybeans, 81 per cent of the wheat and grain sorghum and 69 per cent of the barley. Include other commodities, such as livestock, on a limited

scale where they are related to these crops.

This, roughly speaking, is "The National Model of Agricultural Adjustment and Supply Response."

The overall purpose of the National Model—initiated in 1964 and still in the experimental stage—is to provide a systematic mathematical framework for estimating changes in acreage, production, resource use (and implied farm income changes) associated with a variety of factors.

These factors include prices

paid and received by farmers, resource supplies, technological changes and government programs. The model will be continually refined and kept up to date to reflect the changes most likely to occur in the United States as a whole as well as in different geographic regions and farming situations.

By incorporating data from as many as 95 producing regions into a single programming unit with up to 4,000 equations, the National Model will help farm economists examine and answer—before the fact—such questions as:

—What will a change in support price do to soybean production?

—How will minimum wage legislation affect farm costs? Farm incomes?

—How much extra in wheat acreage and what prices must farmers receive to meet specified increases in export demand for wheat?

—What effect will proposed cotton programs have on acreage in the Cotton Belt? On employment? On incomes?

The answers to such questions will help in the formation of effective farm policies and programs.

The National Model, like the individual farmer, regards each year as a different problem. The individual farmer cannot influence the prices he pays and receives and he cannot know in advance how much his farm will produce. Neither can the National Model.

But both do know what happened last year and in the years before and can act accordingly. The National Model, in fact, by making use of data from preceding years, can provide estimates of the expected yield and price of a given commodity under conditions of maximum profitability.

In the real world, however, such conditions rarely, if ever, exist. It is highly unlikely that any farmer will get the theoretically

maximum profit from his farm even when he makes every effort to do so. He won't know exactly what the most profitable alternatives are when he is planning his crops. And even if he did, he probably couldn't make all the necessary production changes at the same time.

Frequently long-run income considerations, or a personal preference for one crop over another turn the farmer's choice away from his most profitable course of action.

The National Model takes this into account by relating year-to-year changes in decision-making to current decisions.

For example, if farmers increased their cotton acreage an average of 10 per cent some years and decreased it an average of 8 per cent in others, this information can be added in the National Model.

The result is then applied to current cotton acreage and from it the figures on the lower and upper bounds of cotton production for the next year can be derived.

Though the individual farmer cannot influence the price he pays for production goods or receives for his crops, his actions in conjunction with other farmers do have a profound influence on the price.

To illustrate, when he learns the planting intentions of others, the individual farmer is likely to change his plans only to find that everyone else is doing the same. As a result, a whole new production and price picture is created.

The National Model can take this into account, too, along with restraints on land, water and other resources and crop allotments under farm programs.

Its greatest potential appears to lie in its ability to evaluate relative effects of changing conditions on the total crop production picture.

A policy maker might need to know what the relative decrease in production and incomes would

be if wages were raised. He may want to determine how lower or higher prices for wheat support would affect production.

The National Model not only will provide answers under normal conditions, it will provide a range of answers above and below the norm. Instead of showing production based only on normal yields, for example, it would also present estimates based on extremely favorable and unfavorable weather.

It is not, however, designed to explain changes in farm size, specialization or the role of investment in farm output. Nor does it deal with nonagricultural variables of the economy except as they impinge on agriculture.

A short-run test has been completed to determine how well the model would have predicted or explained the 1960-64 changes in acreage and production, looking ahead just one year at a time.

How well did the National Model do on this short-run test? Preliminary findings indicate that model estimates are close to actual response for some commodities in some areas, not so close in others.

The average percentage deviation of total acreage estimates ranged from only 1 per cent for cotton to about 16 per cent for grain sorghum.

So far it appears that, with improvements and refinements, the National Model and its successors can become highly relevant tools of policy research. (1)

## Costs Run High in Texas Ranchers' Continued Battle Against Pesty Brush

Texas brush is putting up a good fight against eradication. About the only way to get rid of it, in fact, is to destroy it by mechanical methods.

Brush infests four out of five of the 107 million acres of grassland and noncommercial forests in Texas. About half the infested area—44 million acres—suffers from a more than 20 per cent

canopy of brush.

The troublesome brush comes in all shapes and sizes, from mesquite and cactus to juniper, live oak, post oak and blackjack oak. And there is little good to be said of any of them from the rancher's point of view. They are unpalatable, if not poisonous, and they compete directly with the more useful plants for water, nutrients, sunlight and space. They do little to stabilize the soil and water supply.

The cost of getting rid of brush can run from as little as 25 cents an acre to as much as \$20.

The cheapest way to eliminate the brush is to burn it off by hand. But the method won't work if the brush is too thinly spread out or not easily burnable.

Common methods of removing single-stemmed trees or medium-size brush are to crush them with a brush roller or to uproot them with a heavy chain pulled between two tractors. The cost ranges from \$1.50 to \$3 an acre.

Trailing over the land with 3-9 railroad rails in tandem will take care of prickly pear and tasajillo for about \$3 or \$6 an acre.

Disking the field will get rid of shallow-rooted plants for anything from \$8 to \$12 an acre.

The most expensive problem and operation is root-plowing large, dense brush or dozing open stands of larger trees. The cost can run from \$10 to \$20 an acre. If the operator seeds along with the root-plowing, he has to add another \$3 an acre to his costs.

Future plans for the land have much to do with the way it is cleared. Range managers and ranchmen, for example, might substitute grass and palatable shrubs for the unwanted brush. Men who look on the area as a source of water would lean to a program of replanting that would increase water infiltration, reduce runoff and the sediment load. And hunters and wildlife groups would probably choose oak species and limit juniper species. (2)

how  
much  
cleanliness  
can  
we  
afford?



*No one expects to live in a completely sterile, hospital-like atmosphere but anything less is technically "pollution." Can we afford our pure water and environment?*

If water used to irrigate crops is unsafe for drinking and water that's drinkable is unfit to use in a car battery—at what point should it be considered polluted?

The answer, of course, is that all water—in fact, the entire earth's atmosphere—is not pure enough for one purpose or another.

Only an astronaut, perhaps, or a scientific worker in a laboratory situation can ever expect to experience an absolutely clean environment.

The rest of humanity is faced with varying degrees of pollution—in the air we breathe, the food we eat and the water we drink.

The biggest polluter, of course, is man himself. With his cars, his crowded cities and his huge factories, he disperses huge quantities of unwanted chemical and physical by-products into the air, water and soil.

He may bury his waste in an attempt to improve the situation, sluice it down sewers, let it blow away or even re-use it, but frequently whatever he does creates as many problems as it solves.

Disposal of waste on land, for example, can pollute the soil and this, in turn, can pollute the air and water through dust storms, erosion and sedimentation. Similarly, sewage dumped in rivers not only pollutes the water but can impair the quality of the air and surrounding soil as well.

What constitutes pollution? Nearly all direct uses of water change its characteristics to some degree. And once changed, most of the water goes back into its previous flow.

For instance, the Mississippi River is re-used a minimum of 16 times between St. Louis and New Orleans.

The quality of the water itself is relative to its actual or potential use and may or may not be based on its purity.

Sometimes water from a single source can meet all demands. More often the water must be processed by flocculation, chlorination, heating, cooling, desalinization and so forth.

Water or soil can, in fact, become polluted though no physical deterioration takes place, if the demands of the users change.

For example, an isolated stream, long carrying impurities from mining operations need not be considered "contaminated" until vacationers begin to use the downstream banks for campsites and attempts are made to stock the stream with fish.

In any case, failure to consider subsequent users can create major economic problems. Running waste off into a river may be cheaper for a factory owner but

more expensive for farmers downstream who must use the water for irrigation.

Whose needs take precedence? Should the factory owner sacrifice his profits to the farmers or the farmers sacrifice their crops to the factory? An economic analysis is necessary to assess costs to all concerned. It will reveal alternative solutions to the problem—perhaps even turn up some that are more profitable than present methods.

Economic research will also consider social costs not ordinarily measured in terms of dollars and cents. It will attempt to uncover not only the most efficient and economical solution but the one that provides the greatest human satisfaction as well.

Such research typically includes:

- Identifying the location, type and amount of pollution.
- Evaluating how seriously all

parties are physically affected by a specific problem involving pollution.

—Identifying all economic effects, including social costs and benefits.

—Listing alternative solutions to pollution problems.

—Evaluating existing pollution laws, quality standards and so forth.

The physical and economic problems vary with the kind of pollutant. According to the National Academy of Sciences and the National Research Council, such pollutants as suspended solids, heavy metals, excessively hot or cold fluids, detergents, bacteria, algae, acids, alkalis and oxygen-demanding organic material can be removed or neutralized by filters and other methods now in use.

An economist can evaluate the cost of each method at each level of pollution from discharge to

## *Where To Get the Facts About Pollution*

The National Referral Center for Science and Technology, Library of Congress, has prepared a *Directory of Information Sources in the United States: Water*, which describes organizations collecting data on water and water-related subjects.

The Office of Water Resources Research, Department of the Interior, published the *Water Resources Catalog*, a two-volume comprehensive inventory of water research.

The Office of Water Resources Research also published the *Bibliography on Socio-Economic Aspects of Water Resources*, abstracting 770 references on this subject through March 1966.

Other information sources:

—The Census of Agriculture provides information on trends in land use, livestock production and other activities related to water use.

—The Agricultural Research Service monitors the effects of pesticides in soils, sediment, water crops and on fish and wildlife.

—The Public Health Service collects, interprets and disseminates information on the changes in water quality in most major river systems.

—The Public Health Service, through its Division of Air Pollution, also maintains a continuous air monitoring program in nine cities.

—The Federal Water Pollution Control Administration conducts an annual survey of pesticides, such as DDT and chlordane in the surface waters of the U.S.

Various state water resource research centers and new research departments of universities throughout the country also have valuable information available on the pollution problem. (3)

later water use and suggest the most effective and efficient alternative.

Dissolved solids, phosphates, attached plants and similar matter present more difficulty. They can be handled with existing methods but the costs are high.

But here again, the economist can suggest the most desirable methods to satisfy the majority need.

Things are even more complicated when the origins of pollution are widely diverse. Even materials ordinarily easily removed create stubborn problems when they emerge from diffused sources into ground water or from land runoff.

Soil sediment is one example of this. Usually easily filtered or precipitated out of the water, sediment caused by poor soil conservation practices over a wide area can so load a river as to make any physical or chemical treatment impractical from the point of view of economics.

Two attempts to deal with pollution problems on the national level are the Water Quality Act of 1965 and the Clean Waters Restoration Act of 1966.

The Water Quality Act of 1965 establishes quality standards and provides grants for research and development of sewerage systems. It emphasizes research on controlling discharge into any body of water.

The Clean Waters Restoration Act of 1966 provides for grants to develop effective, comprehensive control of water quality, including pollution abatement plans for the nation's tidal waters.

How can man abate or prevent the pollution caused by a large, affluent population—and do so at a reasonable cost? The combined efforts of many agencies of government—federal, state and local—as well as universities and other research organizations are now directed toward the answers to these and other similarly important questions. (3)

**WHO LIVES BEST?** Farm operators in Arizona, on the average, have the highest levels of living, according to the latest index of 1964.

Level of living indexes are the measurement of five indicators of economic well being: value of sales per farm, value of land and buildings, and family ownership of telephones, home freezers and automobiles.

Compared with their rankings in the 1959 index, only a few states improved their position in 1964. Florida made the most outstanding gain—moving up from 21st to 15th place. New Mexico made the next highest improvement—going from 22nd to 18th place.

Though the southern states continued to rank lowest on the level of living index, they made the most outstanding improvement on the basis of percentage increases between 1959 and 1964. The eight states with the highest percentage increases in the level of living index were all in the South. Arkansas led with an increase of 48.4 per cent; Mississippi was next with 43.5 per cent. (4)

State	Ranking in		Level of living index		Percentage increase in level of living index
	1964	1959	1964	1959	
Arizona	1	1	192	167	15.0
California	2	2	179	147	21.8
Nevada	3*	3	153	135	13.3
Hawaii	3*	—	153	—	—
Wyoming	4	5*	150	126	19.0
Montana	5	5*	144	126	14.3
Colorado	6	7*	143	124	15.3
Nebraska	7	8*	142	123	15.4
Illinois	8	6	141	125	12.8
Iowa	9*	4	140	128	9.4
Connecticut	9*	7*	140	124	12.9
Delaware	10	9*	139	122	13.9
New Jersey	11	8*	138	123	12.2
Oregon	12	11	137	119	15.1
Idaho	13	9*	136	122	11.5
Washington	14*	10	135	121	11.6
Kansas	14*	12*	135	117	15.4
Florida	15	21	134	102	31.4
South Dakota	16	14*	133	113	17.7
North Dakota	17*	14*	132	113	16.8
Maryland	17*	14*	132	113	16.8
New Mexico	18*	22*	131	100	31.0
Texas	18*	20	131	103	27.2
Indiana	19	12*	130	117	11.1
Minnesota	20*	14*	128	113	13.3
New York	20*	13	128	116	10.3
Massachusetts	21	16*	126	111	13.5
Rhode Island	22*	15*	124	112	10.7
Ohio	22*	15*	124	112	10.7
Pennsylvania	22*	17*	124	110	12.7
Wisconsin	23*	16*	123	111	10.8
Vermont	23*	17*	123	110	11.8
Utah	24	15*	122	112	8.9
Michigan	25	18	120	106	13.2
New Hampshire	26	19	119	104	14.4
Maine	27	23	116	99	17.2
Louisiana	28	26	115	90	27.8
Missouri	29	24	112	93	20.4
Oklahoma	30	25	111	91	22.0
Georgia	31	27	110	82	34.1
Virginia	32	28	103	80	28.8
Alaska	33	22*	100	100	0
North Carolina	34	29*	98	74	32.4
South Carolina	35	29*	97	74	31.4
Arkansas	36	34	95	64	48.4
Tennessee	37	31	94	71	32.4
Alabama	38*	33	92	65	41.5
Kentucky	38*	30	92	72	27.8
West Virginia	39*	32	89	68	30.9
Mississippi	39*	35	89	62	43.5
United States	—	—	122	100	22.0

\* denotes tie

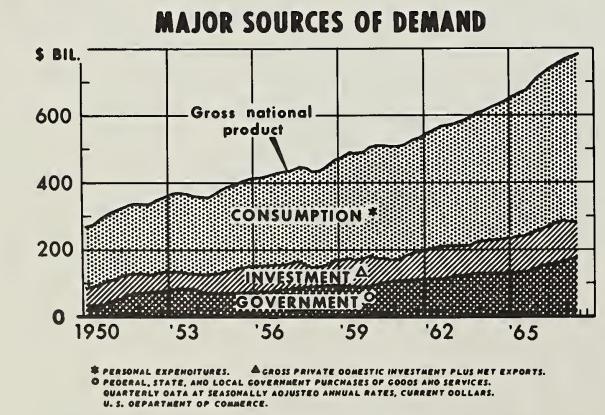
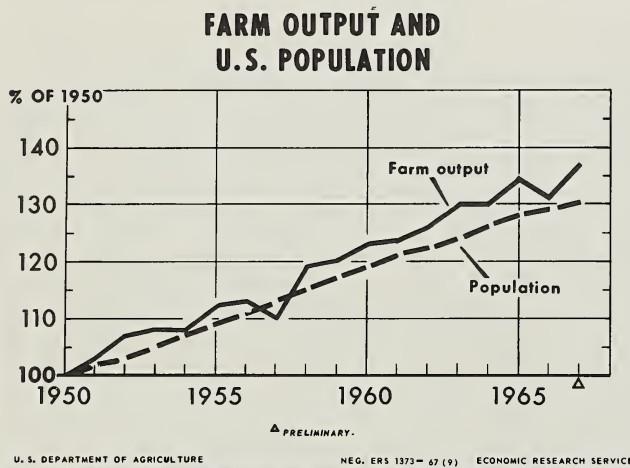
# CHARTBOOK: OUTLOOK FOR 1968

Economic Research Service / U. S. Department of Agriculture



## AGRICULTURE '68

Gains in consumer buying power along with population increases will expand domestic demand for farm products in 1968. Record crop output for 1967 points to larger marketings of farm products in the coming year with big gains for grains and soybeans. Prospects for the larger marketings in 1968 and some improvement in average prices received by farmers are expected to add up to larger cash receipts next year. Although gross farm income is expected to exceed 1967, farm production expenses will continue to rise and may be largely offsetting. Other outlook highlights for 1968: Stronger livestock product prices, a continued high level of exports and a moderate rise in retail food prices.



### How to Order

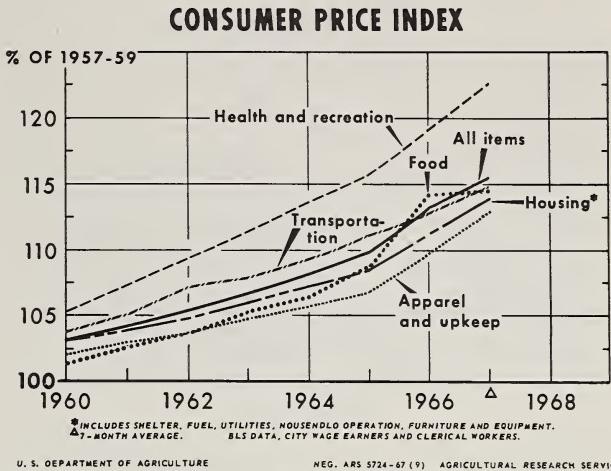
Charts in this magazine are available as color slides or black and white photographs.

Order from Photography Division, Office of Information, USDA, Washington, D.C. 20250. Individual color slides: 30 cents each. Complete set of slides: \$6. Glossy black and white photographs: 5 X 7—90 cents each; 8 X 10—\$1.15 each; larger sizes—\$1.90 per square foot. When ordering refer to slides in Outlook section of *The Farm Index*, give negative number, title of chart and size. Make remittances payable to Office of Information, USDA. A purchase order will be accepted from state institutions.

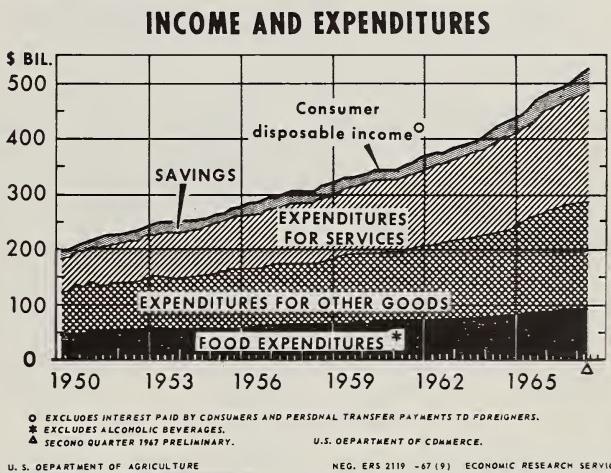
**FARM PRODUCTION CLIMBS:** Farm production is running well above 1966. Production of wheat, rice, feed grains, soybeans, peanuts, sugar cane, meat animals, poultry and eggs are all at record levels this year. As a result, 1967 farm output will generally exceed disappearance so stocks will increase, especially for grains and soybeans.

**DEMAND TO EXPAND IN 1968:** Aggregate economic activity slowed during early 1967, as producers and retailers attempted to reduce excess inventories which were accumulated in late 1966. Later in the year, economic activity picked up with expanded government and consumer demand. Further gains in economic activity are expected in 1968. Major factors include probable increases in purchases of goods and services by consumers and by federal, state and local governments.

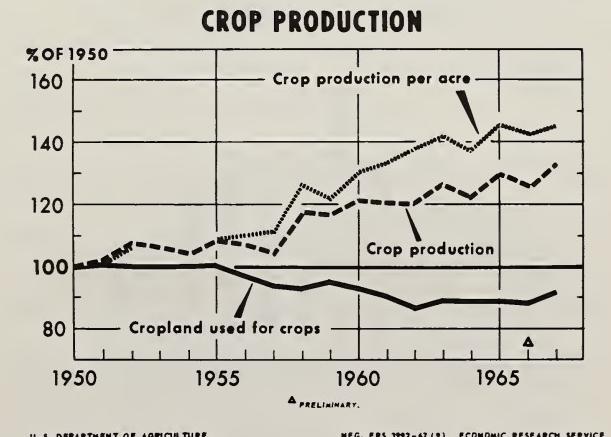
**CONSUMER PRICE LEVEL CONTINUES TO RISE:** The consumer price index in 1967 is expected to be up around  $2\frac{1}{2}$  to 3 per cent from 1966. Food prices may average around 1 per cent above 1966, with most of the increase due to higher prices for restaurant food. Compared with last year, the rate of increase in prices of nonfood items, such as apparel, automobiles, and services is higher. The uptrend in average prices for consumer goods and services is expected to continue in 1968.



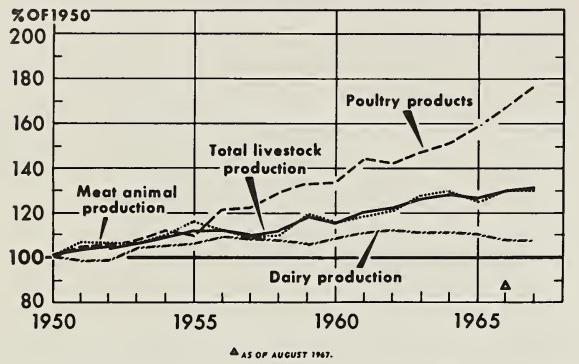
**HIGHER AFTER-TAX INCOME WILL SUPPORT MORE CONSUMER SPENDING IN '68:** Consumers' after-tax income is expected to rise further during the coming year as a result of rising production, increased employment and higher wage rates. Consumer saving continues high but is on the decline, and retail sales have been increasing. Further increases in consumer expenditures will likely be about in line with gains in disposable personal income.



**1967 CROP OUTPUT RECORD LARGE:** Crop output for 1967 is estimated (as of October) at around  $4\frac{1}{2}$  per cent above a year earlier—a new record. The amount of cropland used this year was the largest since 1960—4 per cent above 1966. Crop production per acre is second highest on record—about 1 per cent over last year.



## LIVESTOCK PRODUCTION

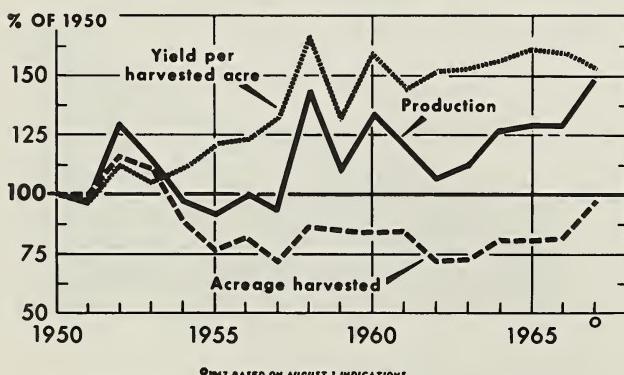


U. S. DEPARTMENT OF AGRICULTURE

NEG. ERS 3993-67 (9) ECONOMIC RESEARCH SERVICE

▲ AS OF AUGUST 1967.

## WHEAT ACREAGE, YIELD AND PRODUCTION

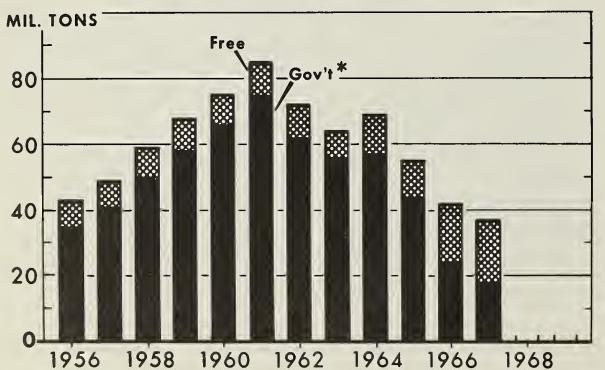


U. S. DEPARTMENT OF AGRICULTURE

NEG. ERS 3967-67 (9) ECONOMIC RESEARCH SERVICE

©1967 BASED ON AUGUST 1 INDICATIONS.

## FEED GRAIN CARRYOVER



STOCKS OF CORN AND SORGHUM GRAIN OCTOBER 1; OATS AND BARLEY JULY 1.

\*UNDER LOAN OR OWNED BY CCC.

1967 BASED ON AUGUST INDICATIONS.

U. S. DEPARTMENT OF AGRICULTURE

NEG. ERS 2901-67 (9) ECONOMIC RESEARCH SERVICE

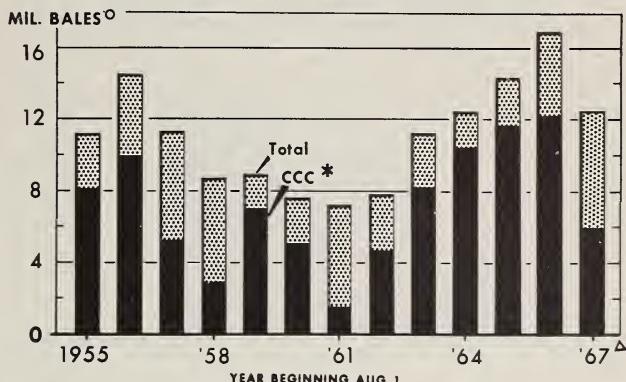
**LIVESTOCK PRODUCTION UP THIS YEAR:** Livestock production in 1967 continued the upward trend of the last decade. It reached a record level—2½ to 3 per cent higher than 1966. At 118, the meat animal production index (1957-59 = 100) this year is 2 per cent above last year. The poultry production index, at 139, is 6 per cent above last year's record. Little overall change is in sight for livestock production in the coming year.

**RECORD WHEAT CROP:** The 1967 wheat crop is estimated at 1,554 million bushels. This is 19 per cent above 1966 and 7 per cent above the previous high set in 1958. The largest acreage harvested since 1952, along with moderately good yields, were factors contributing to the record. Disappearance in the 1967/68 marketing year is expected to be only slightly above the year-earlier level; and for the first time since July 1, 1961, some increase in carryover stocks is in prospect.

**LARGER FEED GRAIN CARRYOVER LIKELY:** Favorable weather in the Midwest raised the October estimate of the 1967 feed grain crop to 176 million tons—19 million over the 1966 crop and about 30 million more than the 1961-65 average. Including grain carried over from last year, the total 1967/68 supply will be around 214 million tons—about 14 million more than in 1966/67. With a somewhat lower feed grain price in prospect, domestic use and exports of corn probably will exceed 1966/67 levels. Total use, however, will probably be a little less than the crop, resulting in some increase in carryover at the end of the 1967/68 marketing year.

## COTTON CARRYOVER

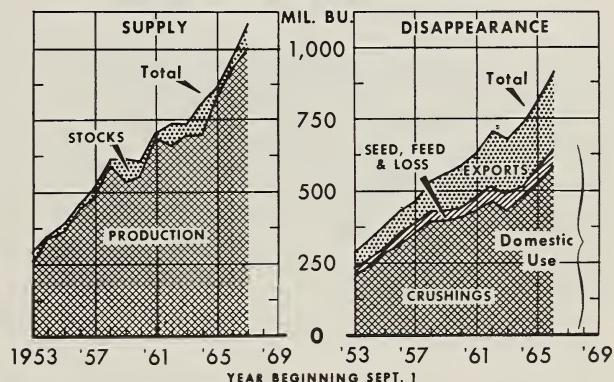
**SMALL CROP EXPECTED TO CUT COTTON STOCKS:** The 1967 cotton crop is estimated at about 8.1 million bales. This is 1.5 million bales below last year's crop and the smallest since 1921. Mill consumption and exports of cotton in the 1967/68 marketing year are forecast at a little under the 1966/67 total of 14.1 million bales. But utilization is expected to exceed the 1967 crop by about 5½ million bales. In this case, carryover at the end of 1967/68 may be down to around 6¾ million bales.



U. S. DEPARTMENT OF AGRICULTURE

NEG. ERS 348-67 (8) ECONOMIC RESEARCH SERVICE

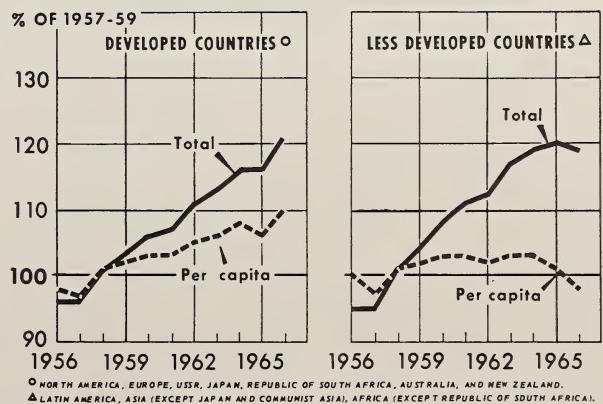
## SOYBEAN SUPPLY AND DISAPPEARANCE



U. S. DEPARTMENT OF AGRICULTURE

NEG. ERS 3896-67 (9) ECONOMIC RESEARCH SERVICE

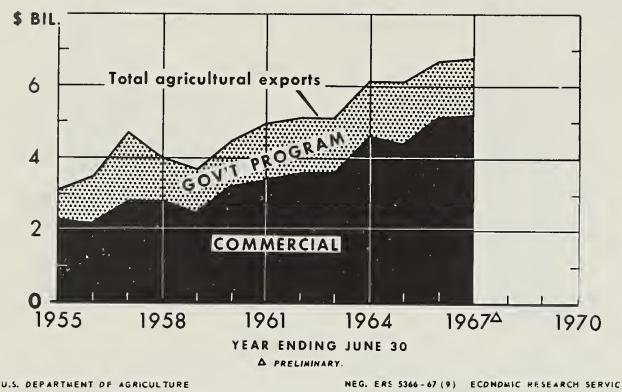
## WORLD AGRICULTURAL PRODUCTION



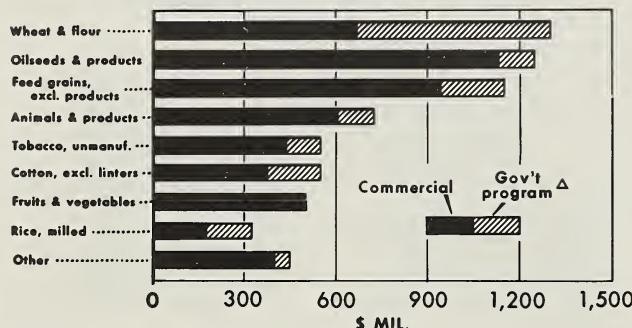
U. S. DEPARTMENT OF AGRICULTURE

NEG. ERS 4750-67 (9) ECONOMIC RESEARCH SERVICE

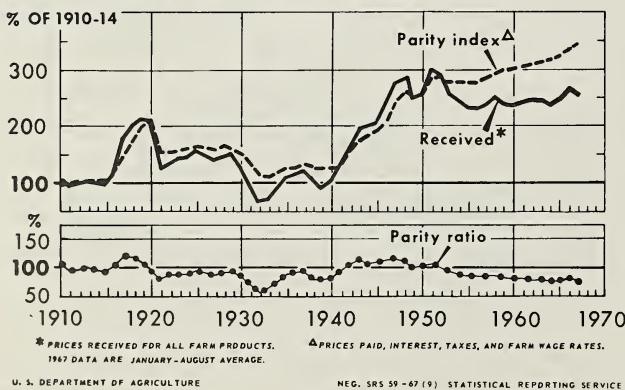
## U.S. AGRICULTURAL EXPORTS: COMMERCIAL AND UNDER GOVERNMENT PROGRAMS



## U.S. AGRICULTURAL EXPORTS, BY COMMODITY GROUP, 1967 \*



## PRICES RECEIVED BY FARMERS, PARITY INDEX, AND PARITY RATIO

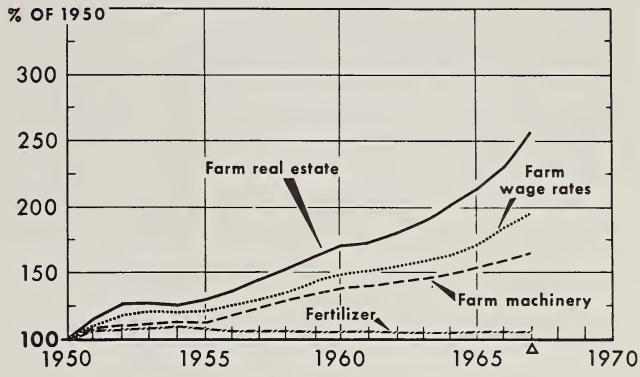


**EXPORT SALES FOR DOLLARS MOUNT TO NEW HIGH:** Increased dollar export sales, at \$5,188 million, accounted for all of the rise in U.S. exports of farm products in fiscal 1966/67 to a new high total of \$6,766 million. Substantial gains in dollar shipments of wheat, tobacco and cotton more than offset a sharp drop in commercial exports of feed grains. Exports under government-financed programs fell 2 per cent to \$1,578 million. Declines in sales for foreign currency and in foreign donations were partially offset by increases in long-term dollar credit sales and barter shipments. In fiscal 1968, U.S. agricultural exports for dollars are again expected to be about three-fourths of total farm exports.

**COTTON, TOBACCO, RICE LEAD EXPORT RISE:** Sharp rises in shipments of cotton, tobacco and rice spurred the total export increase in 1966/67, though soybeans and soybean products led dollar sales. Fiscal 1967/68 exports are expected to exceed the previous year's high in overall volume and may equal the \$6.8 billion value, despite stiffening competition from other world suppliers—especially for feed grains.

**1967 FARM PRICES AVERAGE LOWER:** With generally larger supplies of most farm products this year, prices at the farm level have averaged lower. Through the first nine months of 1967, farm prices on the average were down about 5 per cent. On the other hand, prices paid by farmers this year have continued to rise. As a result, the parity ratio has eased downward.

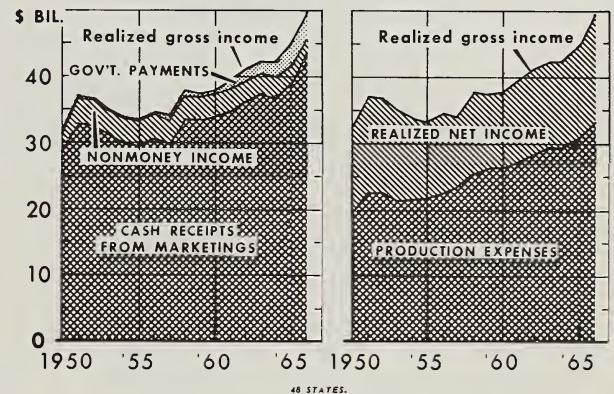
## PRICES OF SELECTED FARM INPUTS



U. S. DEPARTMENT OF AGRICULTURE

NEG. ERS 3995-67 (9) ECONOMIC RESEARCH SERVICE

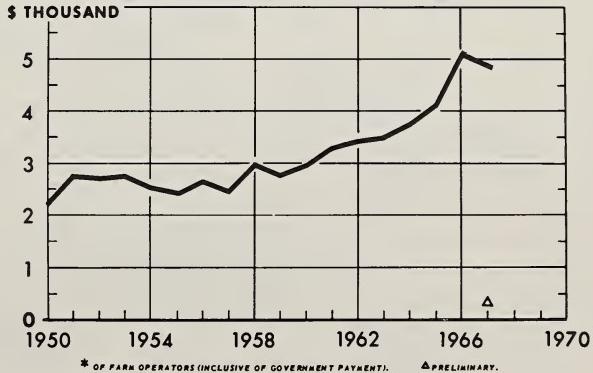
## FARM INCOME COMPONENTS



U. S. DEPARTMENT OF AGRICULTURE

NEG. ERS 3780-67 (8) ECONOMIC RESEARCH SERVICE

## REALIZED NET INCOME PER FARM \*



\* OF FARM OPERATORS (INCLUSIVE OF GOVERNMENT PAYMENTS).

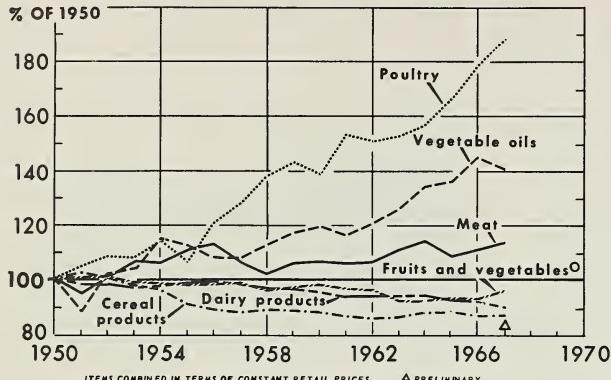
U. S. DEPARTMENT OF AGRICULTURE NEG. ERS 4268-67 (9) ECONOMIC RESEARCH SERVICE

**INPUT COSTS RISING:** Farmers' production expenses were estimated at \$34.4 billion (seasonally adjusted annual rate) in the first three quarters of 1967—up 4 per cent from the same period in 1966. Sales of farm machinery have been running ahead of year-earlier levels. Use of feed and fertilizer has also increased. Prices for most production items have been higher than in 1966 with the exception of feeder livestock; feed prices have also been lower since midyear. The persistent overall uptrend in input prices is expected to continue in 1968.

**HIGHER CASH RECEIPTS EXPECTED:** Cash receipts during the first three quarters of 1967 totaled \$29 billion, 1 per cent below the same period of 1966. Lower prices more than offset a larger volume of farm marketings. Some increase for cash receipts from farm marketings is anticipated in the coming year. The prospective gains in 1968 would raise gross farm income to a new record high of over \$50 billion.

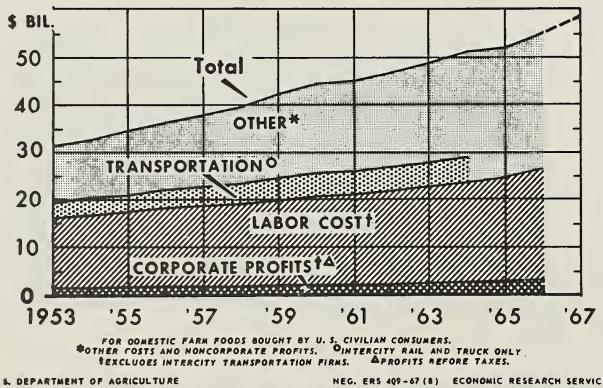
**REALIZED NET FARM INCOME DOWN:** Even though realized net income per farm will be at relatively high levels this year and next year, it will be below the peak level of \$5,049 reached in 1966. Most of the increase last year was due to the substantial gain in aggregate realized net farm income; the decline in farm numbers also contributed to the overall rise. In 1968, aggregate realized net farm income is likely to about equal that in 1967—both slightly under \$15 billion, compared with the near-record \$16.4 billion reached in 1966.

## FOOD CONSUMPTION PER CAPITA



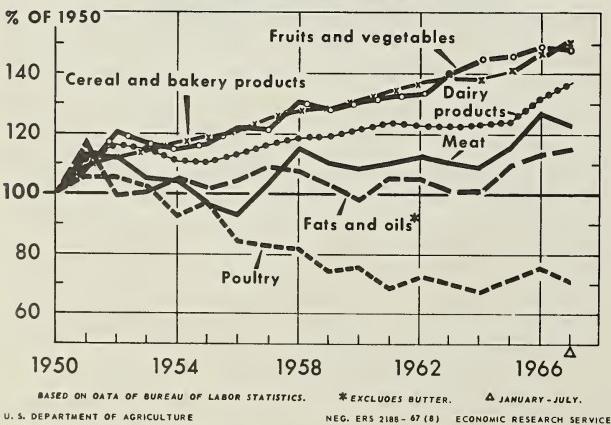
**PER CAPITA FOOD CONSUMPTION TO STABILIZE:** Per capita food consumption in 1967 is averaging about 1½ per cent above 1966, with increases in both livestock products and crop foods. Most of the increase, however, took place during the first three quarters of the year when livestock product consumption rose 3 per cent. Per capita food consumption in 1968 is expected to be around the high level of 1967, though per capita supplies of veal, lamb and turkey next year may average lower. Little change is anticipated in the supply of total crop food products.

## COMPONENTS OF TOTAL FARM FOOD MARKETING BILL



**MARKETING BILL RISE TO CONTINUE:** The bill for marketing domestic farm-originated food products is expected to total \$58 billion in 1967—5 per cent more than in 1966—and to continue to rise in 1968. Rising marketing costs per unit of product contributed more to the 1967 increase than growth in volume of products marketed. Last year, labor costs were 42 per cent of the marketing bill and corporate profits about 5 per cent.

## RETAIL FOOD PRICES



**RETAIL FOOD PRICES UP SLIGHTLY:** Retail food prices in 1967 are averaging around 1 per cent above 1966 (See Consumer Price Index Chart, p. 11). All of the increase is due to an increase of about 5 per cent in restaurant food prices. Prices for food purchased in grocery stores averaged about the same as in 1966. In 1968, retail food prices may increase more than during 1967. But only a moderate (2 to 3 per cent.) rise is expected.

## New Minimum Wage Helps Farmers Attract, Hold More Skilled Workers

When the new Minimum Wage for agriculture went into effect on February 1, 1967, it created a wage floor of \$1.00 per hour on farms using 500 man-days or more of hired labor in a peak quarter during the previous year.

This directly affected only an estimated 390,000 of a possible 1.4 million hired workers and about 33,000 farms—actually less than one per cent of all U.S. farms.

Yet indirectly it may tend to raise wage rates for many other farmworkers.

Next February, the Minimum Wage will go to \$1.15 per hour and the following February (1969), it will be increased again, this time to \$1.30 per hour. It is expected that about one-third of the farmworkers covered will be migratory, outside their home counties.

*For the farm operator, the payment of higher wages should help attract more dependable, skillful and productive workers. However, faced with higher wage bills, there may be a tendency to speed-up the trend to more mechanization on farms.*

Indications are that the Minimum Wage Law will probably not cover any farms with annual sales less than \$5,000; only a few farms with sales between \$5,000 and \$9,999; about 5 per cent of farms with sales between \$10,000 and \$19,999; about 25 per cent of those with sales between \$20,000 and \$39,999 and close to 50 per cent of those with sales of \$40,000 or more. Probably all farms with sales of \$100,000 or more will be directly affected by the legislation.

Large commercial farms hire most of the labor used on farms and already are making the adjustments necessary to meet Minimum Wage coverage.

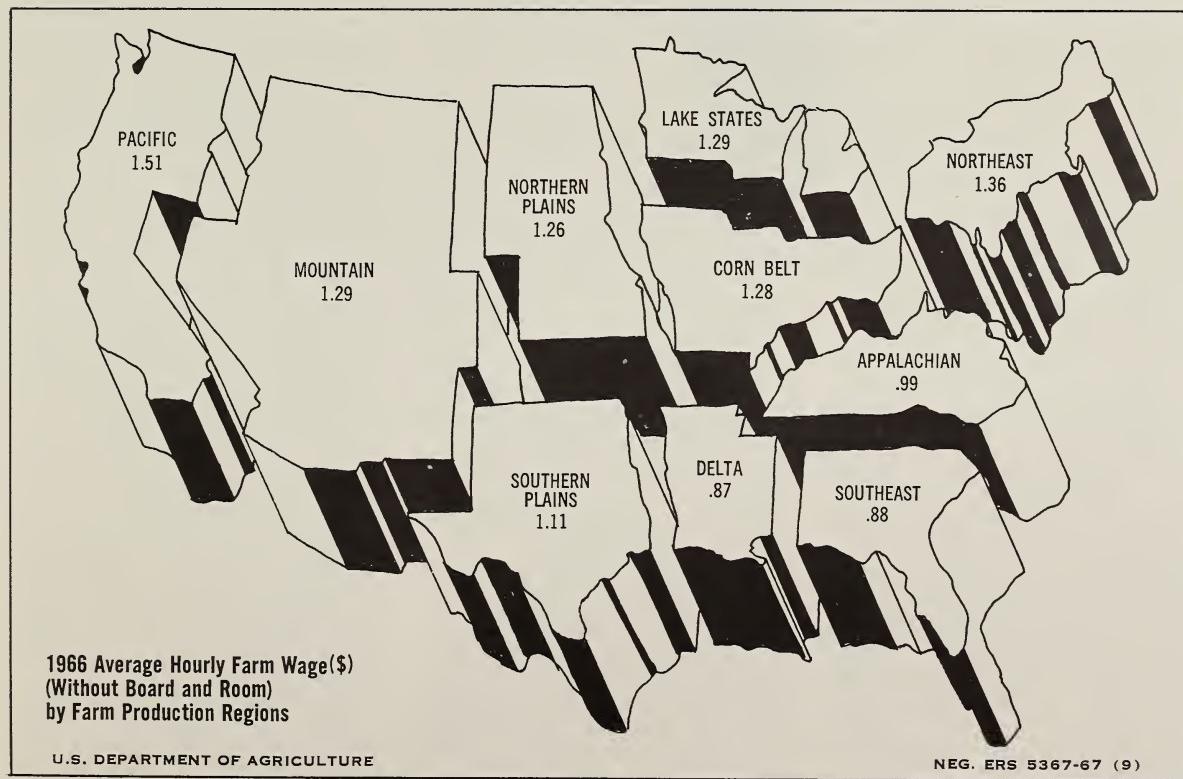
For the farmworker, the minimum wage will result in higher wages per hour on covered farms, except where wages are already above the minimum. With relatively full employment and rising nonfarm wage levels, higher wages will tend to spread to other farms as well, if the other farms are to compete for farm labor.

Farmworkers as a group may receive a 10 per cent overall increase in wages and earnings for the first year.

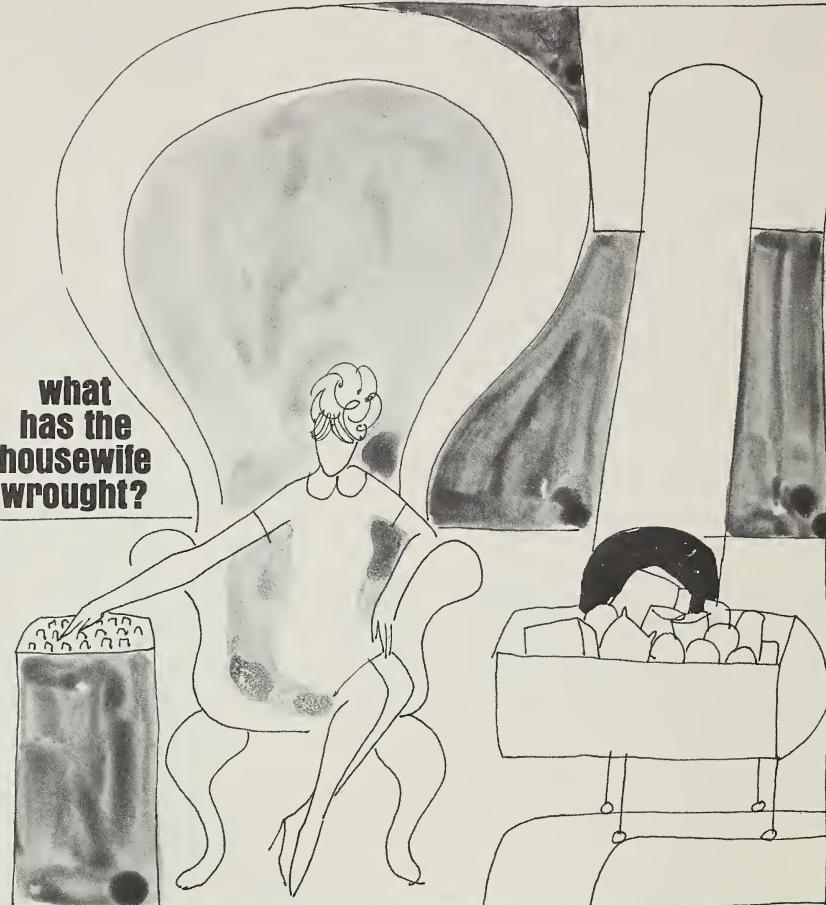
Improvements in fringe benefits can also be expected since operators can include them in the minimum wage computation.

But because of increased labor costs, farm operators are likely to turn more and more to machines, retaining only their most essential workers.

More effort will be devoted, in turn, to training these workers in skills needed to operate complicated agricultural equipment. (5)



**what  
has the  
housewife  
wrought?**



*Service, specials and successive mergers characterize the supermarket industry today. The reason? The better to attract and provide for today's affluent housewife.*

Food retailing has come full circle.

In the old days it was the general store that sold everything from horse harnesses to soda crackers.

Now it's the ultramodern supermarket that sells everything from TV sets to prune-flavored yogurt.

And today's affluent customer apparently wouldn't have it any other way, judging by her shopping habits.

In fact, she's the one who has made it all possible.

She prefers the convenience of buying a wide variety of foods and nonfoods in one store at one time.

She likes the new highly-processed food lines even though they are more expensive.

Because of her preferences, retailers have expanded their product mix to include more varieties of foods and more expensive foods. To woo her, they have combined variable price and non-price merchandising.

*Chain Reaction.* This turn of events, however, has been a mixed blessing for grocery chains.

Historically, grocery chains depended primarily on price competition as a means of increasing sales. With the introduction of the independent supermarket in the thirties, the chains found them-

selves competing with size and variety as well as selected low prices.

For the most part the early cost advantage of the grocery chains has eroded away. Affiliated independents now use chain methods of supply and distribution.

As a result, while the chains' share of total U.S. grocery sales rose from 34.4 per cent in 1948 to 47.0 per cent in 1963, the share of affiliated independents kept pace, rising from 35.4 per cent in 1948 to 43.9 per cent in 1963. After 1954 the growth of the affiliated independents exceeded that of the chains.

From 1954 to 1963 the average market share of the four largest food retailing firms in each of the 218 standard metropolitan statis-

tical areas—and this includes *independent* as well as national and local chain stores—increased from 45.4 per cent to 50.1 per cent.

But this increase was shown to be due entirely to net growth of local and regional firms. On the average, the 20 largest grocery chains in the nation contributed some net increase nationally, but experienced a slight net decline in local areas.

*Move to Merge.* Though grocery chains have been merging since the 1920's, the merger tempo increased fivefold in 1955 when grocery chains made acquisitions totaling \$559 million.

In every year since then grocery chains have made acquisitions of over \$300 million with the peak in 1963 at \$568 million. Setting the pace, the 20 largest chains acquired 297 firms with combined sales of \$3.1 billion—representing the bulk of the mergers for the period.

A side effect of these mergers has been an increase in concentration of grocery wholesale firms with the 50 largest firms expanding their market share to 43 per cent from 1958 to 1963.

In addition, some grocery chains have created their own centralized wholesale purchasing agencies. The largest serves 32 chains.

Food manufacturing by the 40 largest chains has also increased. Emphasis has been on bread and dairy products, with a view to reducing costs of distributing these items from plant to retailer.

*Operating Expenses Up.* Total operating expenses of supermarkets, as reported by a leading trade association, rose 21.9 per cent from 1954 to 1963.

Promotion accounted for 13 per cent of total supermarket expenses in 1964; building occupancy (rent, mortgage, taxes, etc.), 14 per cent; heat, light and power, 4 per cent. The largest single operating cost to supermarkets was labor—46 per cent of operating expenses. (6)

## OUTLOOK for MARKETING:

A rise in total consumer expenditures for U.S.-produced foods—including a rise in the marketing bill and a rise in the farm value of food products—that's the prospect for 1968.

Consumer expenditures for these foods have climbed each year since 1949—and next year probably will prove no exception to this trend.

A greater volume of food purchased, slightly higher retail prices, and a continued uptrend in away-from-home eating are expected to push the consumer bill for food in 1968 above the estimated \$85.5 billion being spent this year.

The estimate for 1967 is about 3 per cent higher than in 1966. This year's rise is mainly due to a greater volume of food purchases, particularly of the more expensive foods. Prices of farm foods in retail stores have declined slightly from last year's level. However,

### *The Angora Angle*

When it comes to finding the finest fibers for mohair fabrics and yarns, a common billy-goat won't do. The only source is the Angora goat, brought to the U.S. from Turkey in the mid-nineteenth century.

Today, the U.S. is one of the world's three major commercial producers of mohair. Turkey and South Africa (including Lesotho) are the others.

U.S. mohair production has exceeded sales for consumption at home and for export since 1964, and prices to growers have trended downward.

Things look better for 1968. U.S. mill consumption is expected to average somewhat higher than 1967 and exports may increase slightly as a result of reduced foreign production.

These factors, along with a decline of U.S. goat numbers will probably result in lower domestic stocks and a strengthening of prices by the end of '68. (8)

prices of "meals out" are up 5 per cent from 1966.

A look at specific foods shows that consumers are spending more this year than last for grain products, fruits and vegetables, but less for most other food groups. Decreases were sharpest for poultry and egg products.

Marketing costs are expected to continue their upward climb in 1968. As a result, the marketing bill next year is likely to rise for the 18th consecutive year.

Hourly earnings of food marketing employees are likely to go up more than output per man-hour, causing an increase in unit marketing charges. Other operating costs are also expected to increase.

In 1967, according to preliminary estimates, it cost about \$58 billion to transport, process, package and distribute our nation's farm foods. This year's marketing bill was up about 5 per cent, or \$2.7 billion, from that in 1966. Higher costs and increased services per unit of product as well as growth in the volume of products accounted for the gain.

Receipts by farmers for food products (the farm value) are estimated at about \$27.5 billion in 1967, down by more than 2 per cent from 1966. This is the first year since 1959 that the farm value has declined. Still the farm value in 1967 is the second largest on record, about \$2.0 billion above the 1965 level.

Farm values of all product groups have been lower this year than last, although volume of marketings increased slightly. Decreases have been sharpest for poultry and eggs.

Next year, however, the farm value is expected to turn up again.

A rise of about 2 per cent in the retail cost of foods in the market basket seems likely in 1968. The marketing spread (which is the difference between the retail cost and the farm value) is expected to average 2 to 3 per cent wider than in 1967. (7)

# Food and the Far East

*Filling the cupboards is the goal toward which most plans and agricultural policies are pointed in the vast region of the Far East and Oceania, 'home' for half the world.*

Half the world's population lives in countries of the Far East and Oceania—a geographic region stretching from Afghanistan to Japan, and from New Zealand to Vietnam.

Despite their many diversities, nearly all the nations in this broad area are agreed on at least one general policy: That food products should get higher priority than nonfood items in an effort to narrow the widening population-food production gap.

Most, but not all, of the Asian countries are underdeveloped. An outstanding exception is Japan, where industry dominates the economy and relatively high living standards prevail.

Also, while most countries of the region have agricultural economies, their food output is inadequate. Exceptions again: Australia and New Zealand are major agricultural exporters, with per capita food consumption and living standards among the highest in the world. And, among world rice exporters, Thailand leads and Burma is third.

The agricultural goal of most Asian underdeveloped nations is self-sufficiency in food production.

Most of the developing countries have some type of overall economic development plan. Their agricultural section most likely hinges on more capital inputs, improving farm practices, adding more land to that already cultivated, and increasing supplies of irrigation water.

Price incentives to farmers and improved marketing facilities have, as yet, been given only secondary roles.

Substantial assistance from developed countries will be needed to carry out the majority of the plans for economic growth. Some of these plans have been implemented with a fair degree of flexibility. Others, such as India's, have been rather rigidly followed.

India—first country of the area to blueprint development plans in detail—is now in its fourth 5-year plan. This plan has very ambitious agricultural targets considering the country's limited success in achieving previous targets.

Other countries with detailed development plans are Malaysia, Pakistan, the Philippines, South Korea, Taiwan and Thailand.

Government policy in Mainland China, during the almost 18 years of communist rule, has been aimed at transforming the country's agriculture from the traditional village organization of small farms to a system of large, state-controlled units.

The production increase realized from this policy has not come up to expectations. This may be one reason why the current 5-year plan, emphasizing agriculture, does not clearly define its course or objectives.

In Japan, policy is geared to assure not only an adequate food supply, but also to upgrade the national diet, to equalize farm returns with urban incomes and to keep food prices in line with other prices.

In Australia and New Zealand—where land is abundant, population is sparse and farms are large—government policy is aiding and encouraging an increase in farm output for both home and overseas marketing. (9)

## OUTLOOK for EXPORTS:

The volume of U.S. farm products moving abroad in this fiscal year, ending June 1968, may exceed that in 1966/67. Lower prices for soybeans, an important export commodity, are expected to contribute to a volume gain.

And export value, as now estimated, will be in the range of \$6.8 billion—the all-time high mark hit last year.

About three-fourths of our agricultural sales abroad will be paid for in dollars. Thus, dollar sales in fiscal 1968 are expected to equal the \$5.2-billion record established in fiscal '67.

Export increases are in sight for animal products, rice, oilseeds and oilseed products.

The value of wheat exports will probably hold fairly close to the fiscal 1967 level, while declines are in prospect for tobacco, fruits and vegetables.

When our farm export total is added up next June, one of the biggest plus factors will probably be the steady economic growth and brisk economic activity in the Western European countries and in Canada and Japan.

Japan, our largest single foreign market, should continue to be a good customer in the coming year, despite keener competition from other major suppliers such as Australia and Thailand.

Another plus factor is the big U.S. 1967 harvest that will provide ample exportable supplies of most commodities.

Some major developments, however, will tend to hold down overseas demand for our farm products:

—Along with the U.S., most

## Income Returns

Country A's annual income is little over \$50 per person. The country imports only about 50 cents worth of U.S. farm products per capita per year—mostly under government-sponsored Food for Peace programs.

Country B has a per capita income of over \$1,000 annually. Its yearly per person imports of U.S. farm products average \$8 worth—mainly commercial purchases paid for in dollars.

Conclusion: Hungry people are not a ready, profitable market for our farmers' products. Conversely, U.S. programs to help a country develop its own economy are likely in the long-run to foster, not reduce, that country's agricultural imports from us. (11)

other major exporting countries—as well as major importing countries—will also have increased outputs of leading export items.

—In Western Europe, overproduction has created surplus problems for some commodities, including butter and poultry.

Despite these dampening factors, many other signs indicate that our favorable U.S. agricultural trade balance (exports less imports) will continue well above \$2-billion in fiscal 1968. (10)

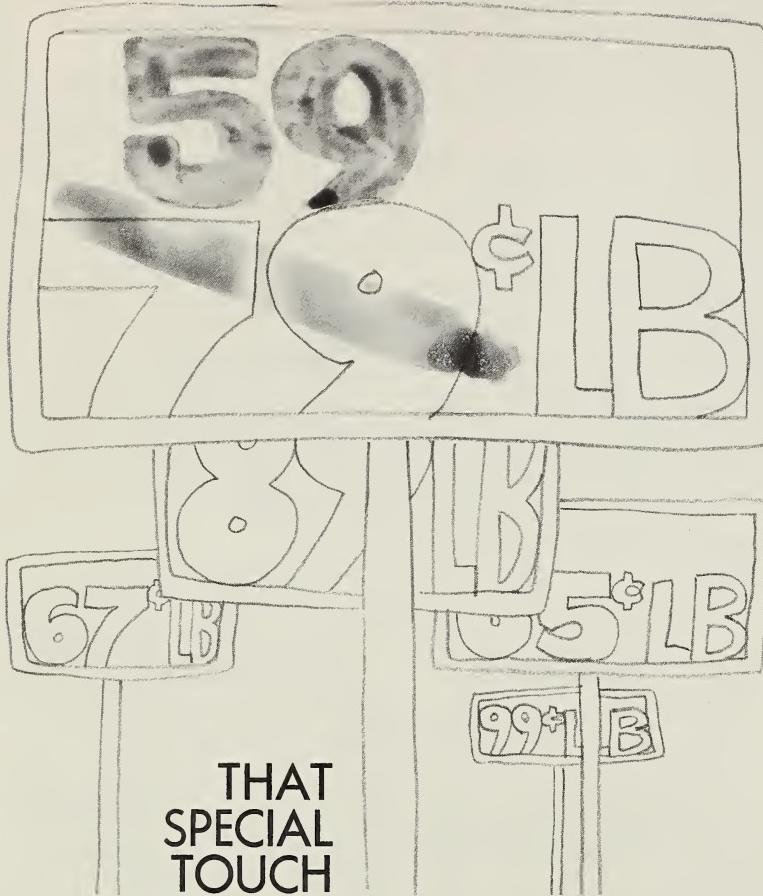
## Foreign Spotlight

**COLOMBIA:** By the end of this year, Colombia will be using a new storage complex of 60 silos with a capacity of 28,000 tons of coffee and 40,000 tons of wheat. Cost of the complex is estimated at about \$1.8 million.

**CANADA:** Government subsidies will be paid on wheat sold by the Wheat Board at prices below the minimum of the new International Grains Arrangement. (Minimum price for No. 1 Manitoba at Lakehead has been set at U.S. \$1.81 a bushel.) Subsidies apply to sales made from July 31, 1967—when the old International Wheat Agreement expired—until July 1, 1968 when the new arrangement is expected to become effective.

**BRAZIL:** The World Bank has signed a \$40-million livestock loan agreement with Brazil. Added to this will be \$24 million from the government and \$16 million from livestock organizations. The total will make up the National Livestock Development Fund for pasture improvement, machinery, farm structures and technical aid.

**HUNGARY:** Collective and state farms will be able to negotiate directly with foreign buyers under a new decree effective January 1, 1968. Foreign trade companies will now only serve as agents for the producing enterprises. Purpose is to put greater emphasis on quality of farm products and their immediate salability. Profits thus are more a function of efficiency of production. (12)



*Meat specials in retailing stimulate business, as thrifty housewives look for food savings. But it's not easy to determine their total effect on the meat industry.*

Chances are it's been a while since you paid the regular price for a cut of beef or pork.

Seems everyone is following the specials these days, varying their menus according to the meat that's on sale.

Housewives expect to find several different meat cuts at their stores, and have become so accustomed to buying certain cuts on special that they'd rather not pay the regular price.

Sometimes prices of the more expensive meat cuts are lowered

30 to 40 cents a pound on special days.

No one knows for sure exactly how much of a difference specials are making in the retailing of meat. Information on the average decrease in meat prices is needed to determine the actual retail value. After the retail value is computed, it can be compared with wholesale and live prices to obtain the much-used price spreads or margins.

The Bureau of Labor Statistics (BLS) surveys prices on Tuesday, Wednesday and Thursday, the first week of each month—each store on one of these days. Since many specials don't always start until Thursday, some specials are not included. The BLS price series has compensated somewhat for

this, and BLS personnel estimate that they now obtain prices on about two-thirds of all meat specials.

However, the BLS price series does not include data on the volume of sales, so that the increased purchasing usually stimulated by the special prices is not recorded at the present time.

The U. S. Department of Agriculture's Market Basket figures, based on the BLS price series, are now in process of being revised to reflect more accurately the effect of meat price specials in the supermarket.

When prices go on special, larger quantities of a certain cut of meat are apt to be sold at the lower price than would normally have been sold. Thus, the actual retail value of the meat, in terms of returns to the supermarket and the industry, may drop appreciably as a result of specials.

Specials remain good business, however, since they stimulate other shopping in the same store. Once lured in by that special on sirloin steak, a housewife will probably stay to get the rest of her meats and groceries. (13)

## Two Humps Are Better Than One To Satisfy More Camel Hair Customers

Maybe it's an upsurge in psychedelic art. Or maybe our winters have been getting colder.

Whatever the reason, we've been using more and more camel hair in recent years. And it's used primarily as an ingredient in overcoat fabrics and, to a lesser extent, in artists' brushes.

Though an attempt was made in the last century to acclimate the camel to our Southwest ranges, the project was unsuccessful.

Thus we import camel hair; and imports have risen from less than 140,000 pounds in 1960 to about 730,000 pounds last year. (This is, of course, barely a wisp alongside the total volume of domestic and foreign wool and other animal

fibers — which include feathers, furs and silk—used in the United States.)

Most of the camel hair entering world trade comes from two-humped Bactrian-type camels of Outer Mongolia. The one-humped dromedary also contributes small amounts.

Camels aren't sheared or plucked like other fleece-bearing animals. Their matted strands and tufts of hair are gathered as they are shed naturally. Outer, tough hair can be as long as 15 inches; the soft undercoat has fine, wool-like fibers 1 to 5 inches long. (14)

## Coconuts Join Cows in Supplying Basic Ingredients of Imitation Milk

Add imitation milk to the many new food products competing for consumer favor and coveted shelf space.

Retail sales of imitation, or filled, milk have to date been mainly concentrated in Arizona, California, Washington and Oregon. And, as sales volume so far has been relatively small, it's too early in the game for judgments on consumer acceptance or potential impact on sales of fresh milk.

Coconut oil—a vegetable fat—is substituted for butterfat in the imitation fluid milk products now being marketed.

In general, these products combine the coconut oil, fluid skim milk (or nonfat dry milk powder) and an imitation milk base mix. This mix contains the emulsifiers and stabilizers, and in addition

may contain corn syrup solids or possibly soy protein.

Processors can use the same equipment in making imitation fluid milk as they do in processing fresh fluid milk.

Distribution, refrigerated storage requirements, and keeping qualities are also said to be comparable.

Retail prices of the imitation product could be significantly less than those for fresh fluid milk—especially if the cost spread between butterfat and vegetable oils (coconut oil, in particular) continues to widen.

State regulatory laws, however, will be a factor in future sales.

For one thing, the fat content of imitation milk may be less than the minimum standards for fluid whole milk.

California, for example, requires a minimum of 3 per cent vegetable fat in the imitation product, but 3.5 per cent butterfat in whole milk. Arizona has the same butterfat minimum for whole milk, but has set no standards for imitation milk.

In most states, existing laws do not permit the imitation product to be legally marketed. (15)

## Processed Cranberries in Sauces and Jellies Relished by U.S. Consumers

Cranberries are as traditional for Thanksgiving as turkey. It's quite likely they accompanied the turkey and bear meat served at the Pilgrims' first Thanksgiving feast in 1621.

Modern-day Americans ate

## ***Chew-In***

The twist . . . the plug . . . the scrap . . . and the fine-cut.

Not dance fads, but varieties of chewing tobacco.

Total U.S. output of tobacco for chewing has been fairly stable since 1960, after declining for a number of years.

Production in 1967 is expected to reach 65 million pounds—about the same as last year.

Scrap chewing and plug chewing make up 90 per cent of the Nation's annual output of chewing tobacco.

On the average, American men will have chewed a little over a pound per person this year. There's no report on the distaff side. (17)

about a pound of cranberries per person in 1966—with preferences running to processed forms.

This year there should be plenty of cranberries to satisfy appetites not only on the holidays but throughout the year as well. The 1967 crop was estimated in October at 152.9 million pounds—only 4 per cent below the record harvest in 1966 and 16 per cent above the 1961-65 average.

In Massachusetts, the leading cranberry state, this year's crop is estimated at 70 million pounds. Second in volume is Wisconsin, where the 1967 crop is put at 50 million pounds.

Cranberry production in other major states this year is estimated at 15.7 million pounds in New Jersey, 11.5 million pounds in Washington, and 5.7 million pounds in Oregon. (16)

***Numbers in parentheses at end of stories refer to sources listed below:***

1. W. N. Schaller, A National Model of Agricultural Production Adjustment and Supply Response (M) and (SM); 2. C. C. Boykin, Economics of Various Mechanical Methods of Controlling Brush (S);
3. J. P. Biniek and G. C. Taylor, Economics of Water Pollution (S);
4. J. M. Zimmer and E. S. Manny, Farm Operator Level of Living Indexes for Counties of the United States, 1950, 1959 and 1964, Stat. Bul. 406 (P); 5. E. F. Hodges, Wage and Hour Law and How It Will Affect Agriculture (S); 6. Marketing Economics Division (SM);
7. Marketing and Transportation Situation, MTS-167 (P); 8. Wool Situation, TWS-81 (P); 9. Foreign Regional Analysis Division, Agricultural Policies in the Far East and Oceania (M); 10. R. L. Tontz,

- D. H. Rahe, "U.S. Agricultural Exports in Fiscal 1968 to Continue Strong," For. Agri. Trade, Nov. '67 (P); 11. R. P. Christensen, "U.S. Role in Alleviating World Hunger," (S); 12. Foreign Regional Analysis Division (SM); 13. L. A. Deuwer, Examining the Effects of Specials on Retail Meat Prices (M); 14. Wool Statistics and Related Data, 1920-64, Supp. 1966, Stat. Bul. 363 (P); 15. H. H. Moede, Imitation Fluid Milk—Today and Tomorrow (S); 16. Fruit Situation, TFS-164 (P); 17. Tobacco Situation, TS-121 (P).

- Speech (S); published report (P); unpublished manuscript (M); special material (SM); \*State publications may be obtained only by writing to the experiment station or university cited.

OFFICIAL BUSINESS

GA05461 DS18035DM226 10A 0001  
DM GADSBY  
RC&D RDED ERS USDA  
2608 7TH & D STS  
WASHINGTON DC 20025

To stop mailing  or to change your address  send this sheet with new address to The Farm Index, OMS, U.S. Department of Agriculture, Rm. 1469, Washington, D.C. 20260.

### The Great Outdoors

Snow-covered mountain crags, rolling plains and desert and deep, green valleys.

America's bountiful resources hold the key to a better way of life for the millions of people who enjoy their natural beauty each year.

The conservation, the recreation potential and the beautification of our natural resources are all included in the 1967 Yearbook of Agriculture, *Outdoors USA*, published October 26.

The Department of Agriculture is "moving forward . . . to restore, conserve, and widely use our natural heritage and maintain it for future generations," says Secretary of Agriculture Orville L. Freeman in the foreword. "Through conservation and the development of our natural resources, the rural areas can be ideal sites for our communities of tomorrow."

The Yearbook is the 68th issued since USDA began the series in 1894. It tells the stories of our forests, water supplies, natural beauty and open countryside in over 100 brief, feature-type articles and in many photographs—over 40 in color.

The wide range of subjects is suggested by such titles as: "Tips on Hiking," "A Drink From the Desert," "Flood Plain Safeguards," "A Town Recreation Center."

The Yearbook is distributed mainly by members of Congress. Copies are for sale by the Superintendent of Documents, Government Printing Office, Washington, D.C. 20402. Price is \$2.75; add 25 per cent for foreign mailing.

# THE FARM INDEX

## CONTENTS

	page
THE FARM: <i>The National Farm Model—A framework for predicting the future</i>	4
RURAL LIFE: <i>How Much Cleanliness Can We Afford?—Pollution problems</i>	6
MARKETING: <i>What Has the Housewife Wrought?—Supermarket changes</i>	18
THE FOREIGN MARKET: <i>Food and the Far East—Hoping for full cupboards</i>	20
THE CONSUMER: <i>That Special Touch—Thrifty housewives and retail meat</i>	22
SPECIAL FEATURE: <i>Outlook 1968—Chartbook</i>	9

Numbers in parentheses at end of stories refer to sources listed at end of issue.

The Farm Index is published monthly by the Economic Research Service, U. S. Department of Agriculture. November 1967. Vol. VI, No. 11.

The contents of this magazine are based largely on research of the Economic Research Service and on material developed in cooperation with state agricultural experiment stations. All articles may be reprinted without permission. For information about the contents, write the editor, the Farm Index, Office of Management Services, U.S. Department of Agriculture, Washington, D.C. 20250. Use of funds for printing this publication approved by the Director of the Bureau of the Budget, May 24, 1967. Subscription orders should be sent to the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Price 20 cents (single copy). Subscription price: \$2.00 per year; 75 cents additional for foreign mailing.

EDITOR, Theodore Crane; ASSISTANT EDITOR, Audrey Ames Cook; STAFF EDITORS, Geraldine Schumacher, Stan Baer. PRODUCTION EDITOR, Tracy G. Zacharias.